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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/813,162	03/21/2001	Syuuzi Kodama	1484.1005	2368

21171 7590 02/15/2005

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EXAMINER

KERN, MATTHEW C

ART UNIT	PAPER NUMBER
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2654

DATE MAILED: 02/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/813,162

Applicant(s)

KODAMA, SYUUZI

Examiner

Kern Matthew

Art Unit

2654

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 01/02/1989.
- 4) ☐ Interview Summary (PTO-413)
 Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

Claim Objections

1. Claim 1 is objected to because of the following informality: the preamble refers to "automatic transfer." The examiner interprets this as "automatic translator".

Appropriate correction is required.

Claim 1 is further objected to because of the following informality: in the last paragraph of this claim, instead of "...the conceptual categories is determined by...", it should read "...the conceptual categories as determined by..." . Appropriate correction is required.

Drawings

The drawings are objected to under 37 CFR 1.83(a) because they fail to show in Fig. 4, S4 the decision branch taken when no conceptual category can be found corresponding to the morpheme, as described in the specification: Please place a 'N' leading to block S6 and a 'Y' leading to block S5. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If

Art Unit: 2654

a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2 and 4-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Yokogawa (US Patent 5,225,981).

As per claims 1 and 4, Yokogawa et al. teach:

- original inputting means for inputting an original to be translated (input section, Figure 2, element 1010);

Art Unit: 2654

- morphological analyzing means for dividing a sequence of morphemes from the original inputted by the original inputting means (morpheme parsing section, fig.2, element 1016).
- converting means for converting the morphemes to conceptual categories ("numerical figure numerical figure" means "year", col 53, lines 4-5) to be output.
- typical verifying means ("counter n that counts the number of dictionary reference units of matching upon retrieving a succession of dictionary reference units" implies that if $n=0$, no match occurs, and for $n \geq 1$, a match occurs, col 53, lines 30-43, col 54, lines 49-53) for verifying whether or not a string of predetermined typical conceptual categories (matching table, fig 53, element 7128) exists in a sequence of the conceptual categories outputted from the converting means ("26 Jan., '80" are matched with "cardinal number, month, year" in the matching table 7128, col 55 lines 25-27).
- a replacing means for generating a pattern of a predetermined translated sentence corresponding to the string of the conceptual categories to replace the pattern of the predetermined translated sentence (structure transformation section 7024 prepares a corresponding Japanese structure tree from the structure tree which is an intermediate English structure and transforms it into a Japanese-underlying structure from which a Japanese sentence can be translated, col 51, lines 40-44) with translated words corresponding to the original morphemes of the conceptual categories constituting the pattern of the translated sentence, when the string of predetermined typical conceptual categories exists in the sequence of the conceptual categories as determined by the typical sentence verifying means.

Art Unit: 2654

- Lastly, to implement a method in a computer system necessarily implies a method of storage.

As per claims 2 and 5, Yokogawa teaches:

- a converting means with a vocabulary information file (matching table, col. 55, lines 24-27) that defines the relationship between the conceptual categories and the morphemes contained therein ("26 Jan, '80" are matched with "cardinal number, month, year", col. 55, lines 24-27).
- a sentence verifying means with a first table (structure transformation section has access fig 54 element 7024, to parsing rule file, fig 54, element 7036) that stores a pair (corresponding Japanese structure tree from the structure tree which is intermediate English structure and transforms it into a Japanese –underlying structure, col 51, lines 40-44) of the string of the predetermined conceptual categories and the pattern of the predetermined translated sentence corresponding to the string.
- a replacing means with a second table (word dictionary 7018, col 51, lines 65-66) that stores a pair (English and Japanese words, col. 51, lines 67) of the morpheme constituting the pattern of the translated sentence and the predetermined translated word corresponding to the morpheme (stated vocabularies, as well as connective relationships, col 51 lines 68, col 52, lines 1-3).
- Lastly, to implement a method in a computer system necessarily implies a method of storage.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokogawa in view of Takeda et al (US patent 5,895,446).

Yokogawa does not teach a vocabulary information file, first table or second table defined or set by the user. Takeda et al. teach a translation system the can be easily customized by the user (col 1, lines 42-44). It would have been obvious for one of ordinary skill at the time of invention to have Yokogawa's language analyzer be supplemented by the user defined option taught by Takeda so as to make translation more precise by focusing on the vocabulary of interest.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Muraki (US patent 4,703,425) teaches a morphological/conceptual dictionary that can be used in a translation system.

Emori et al. (US patent 5,619,410) teaches semantic classification used in a keyword extraction apparatus.

Art Unit: 2654

Nakamura et al. (US patent 5,842,159) teaches a sentence analyzer with an input module, pattern matching block, and replacing section used in pattern matching for recognizing a weakly linked idiom.

Kuruma et al. (US patent 5,321,606) teaches pattern matching as related to computer languages.

Fukumochi et al. (US patent 4,833,611) teaches tree conversion rules in a translation system.

5. Any inquiry concerning this communication should be directed to Mr. Matthew Kern, whose telephone number is (703) 305-4828 or fax number (703) 305-9508. The examiner can normally be reached Mondays-Fridays from 9:30 am to 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Talivaldis Smits, can be reached at (703) 306-3011. The facsimile phone number for this Technology Center is (703) 305-9508.

Any inquiry of a general nature of relating to the status of this application should be directed to the Technology Center 2600 receptionist, whose telephone number is (703) 746-6055.

2/4/2005

MCK


RICHEMOND DORVIL
SUPERVISORY PATENT EXAMINER